

Listing of Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently amended) An apparatus for directing a laser beam toward a target location on a workpiece in response to a target location coordinate position command, comprising:

a positioner positioning the workpiece and the laser beam relative to one another in response to the coordinate position command;

first and second position sensors coupled to the positioner for producing first and second position signals indicative of an actual coordinate position of the positioner;

first and second summing junctions comparing the coordinate position command and the first and second position signals and producing first and second error signals indicative of a difference between the coordinate position command and the actual coordinate position;

a [[first]] steering mirror controller coupled to at least the first error signal for producing at least a first position correction signal; [[and]]

a two-axis steering mirror including a pivot point, and responsive to at least the first position correction signal for receiving the laser beam at or near the pivot point and deflecting the laser beam toward the target location on the workpiece; and

a focusing lens having an entrance pupil located at or near the pivot point for receiving and focusing the deflected laser beam on the target location of the workpiece.

2. (Currently amended) The apparatus of claim 1 ~~further including a second in which~~ the steering mirror controller is coupled to the second error signal for producing a second position correction signal, and in which the two-axis steering mirror is further responsive to the second position correction signal for ~~receiving the laser beam and~~ deflecting the laser beam ~~toward the target location on the workpiece.~~

3. (Original) The apparatus of claim 1 in which the coordinate position command includes information for positioning the positioner to respective X-axis and Y-axis orthogonal coordinate locations.

4. (Original) The apparatus of claim 1 in which the first and second error signals conform to a first coordinate system and the two-axis steering mirror is responsive to a

second coordinate system, and in which the apparatus further includes a coordinate transform generator for converting at least one of the first and second error signals to the second coordinate system.

5. (Original) The apparatus of claim 1 in which the apparatus further includes a second steering mirror controller and in which the target location coordinate position command further includes mirror positioning information, the first and second steering mirror controllers positioning the two-axis steering mirror in response to the mirror positioning information and at least the first position correction signal.

6. (Canceled)

7. (Original) The apparatus of claim 1 in which the two-axis steering mirror is positioned by at least one piezo electric actuator.

8. (Original) The apparatus of claim 1 in which the two-axis steering mirror is positioned by at least one voice coil actuator.

9. (Original) The apparatus of claim 1 in which the positioner scans the workpiece and the laser beam relative to one another in a second axis direction in response to a series of the coordinate position commands while the two-axis steering mirror is responsive to a series of the first position correction signals for receiving the laser beam and deflecting the laser beam toward a set of the target locations on the workpiece.

10 (Canceled)

11. (Original) The apparatus of claim 1 in which the workpiece includes an integrated memory circuit and in which the target location includes a severable link for removing a defective memory cell.

12. (Original) The apparatus of claim 1 in which the workpiece includes an electronic circuit element that is trimmed to a predetermined performance characteristic by the laser beam.

13. (Original) The apparatus of claim 1 in which the positioner includes stages that are arranged in a stacked configuration.

14. (Original) The apparatus of claim 1 in which the positioner includes stages that are arranged in a split-axis configuration.

15. (Original) The apparatus of claim 1 in which the positioner includes a planar positioning stage.

16. (Currently amended) A method for directing a laser beam toward a target location on a workpiece in response to a target location coordinate position command, comprising:

positioning the workpiece and the laser beam relative to one another in response to the coordinate position command;

sensing an actual coordinate position of the workpiece relative to the coordinate position command;

producing first and second error signals indicative of a difference between the coordinate position command and the actual coordinate position;

producing at least a first position correction signal in response to one of the first and second error signals;

positioning a two-axis steering mirror including a pivot point in response to at least the first position correction signal for receiving the laser beam at or near the pivot point and deflecting the laser beam toward the target location on the workpiece; and

deflecting providing a focusing lens having an entrance pupil located at or near the pivot point for receiving and focusing the laser beam toward the target location on the workpiece.

17. (Original) The method of claim 16 further including producing a second position correction signal in response to the other one of the first and second error signals, and positioning the two-axis steering mirror in response to the first and second position correction signals.

18. (Original) The method of claim 16 in which the coordinate position command includes X-axis and Y-axis orthogonal coordinate locations.

19. (Original) The method of claim 16 in which the first and second error signals conform to a first coordinate system and the a two-axis steering mirror is responsive to a second coordinate system, and in which the method further includes transforming at least one of the first and second error signals into the second coordinate system.

20. (Original) The method of claim 16 in which the target location coordinate position command includes mirror positioning information, and the method further includes positioning the two-axis steering mirror in response to the mirror positioning information and at least the first position correction signal.

21. (Canceled)

22. (Original) The method of claim 16 further including scanning the workpiece and the laser beam relative to one another in a second axis direction in response to a series of the coordinate position commands and moving the two-axis steering mirror in response to a series of the first position correction signals.

23-27 (Canceled)